

## **4.8 CULTURAL RESOURCES**

This section analyzes the potential impacts of the Proposed Project on cultural resources including paleontological, archaeological, historical, and ethnographic resources. Cultural resources consist of places or objects that are valued for scientific, historical, or religious reasons. Cultural resources include prehistoric archaeological sites, architectural remains, historic remains, shipwrecks, isolated artifacts, and other material objects that provide evidence of past human activities. Certain places may be protected as important cultural resources because of their value to a culture for traditional and religious reasons. The setting is described first in this section followed by a discussion of the regulatory framework designed to protect cultural resources, and an evaluation of the potential impacts and recommended mitigation measures concludes the section.

### **4.8.1 Environmental Setting**

The project site is located approximately 850 feet (259.08 m) off the coast of Goleta, California between Coal Oil Point and Ellwood Pier. The entire project area is located in the Pacific Ocean within the USGS Dos Pueblos Canyon 7.5 minute quadrangle. The Proposed Project involves removing a remnant pier structure, and installing four piles and replacement roosting/nesting platforms. The environmental setting for each resource is described below.

#### **4.8.1.1 Paleontological Resources**

The project site, located on the northwestern shelf of the Santa Barbara Channel, lies within the submerged western-most portion of the Transverse Range Province. This offshore area is composed of sedimentary rock ranging in age from the Tertiary period into the Holocene epoch. The project site is underlain by the Miocene Monterey formation which is in turn overlain by Quaternary age marine and non-marine sediments. Geological strata onshore is represented by alluvial and terrace deposits overlying Franciscan and Santa Barbara formations of Quaternary age, followed by Tertiary deposits. Prehistoric sites consist of remains deposited during a period of lowered sea level prior to the Holocene Transgression. During the mid-Wisconsin glacial period of the late Pleistocene, about 15,000 years before present (b.p.), sea level may have reached 394 feet (120.1 m) lower than at present. The ocean began to rise to present levels with the onset of the Holocene Transgression. Present sea levels were established between 5,000 to 7,000 years b.p. This caused the shorelines to move upslope and inland from the edge of the continental shelf (Continental Shelf Associates 1995).

The Monterey formation is identified as having a moderate level of paleontological importance (County of Ventura, 2000). This formation is reported to have yielded vertebrate fossils at Gaviota State Park (large halibut fish and seal bones) and at Vandenburg Air Force Base (fish/algae prints) (National Park Service, April, 2003).

Preservation of intact prehistoric resources along the California coast is considered rare due to the high-energy nature of the shoreline environment. Prehistoric artifacts and fossils in the nearshore environment may be destroyed, altered, or displaced by wave action and

sediment transport processes. There is little information on the existence of fossil evidence in the project area.

#### **4.8.1.2 Archaeological Resources**

A large aboriginal population lived in the Goleta area during late prehistoric times. The area offshore of Goleta was the scene of frequent aboriginal maritime activity. Onshore from the project area was historically inhabited by the Barbareno, one of the Chumashan speaking Native American tribes of California. The Chumash ranged from Los Angeles County to San Louis Obispo County and inland for more than 50 miles (80.5 km). Archaeological evidence indicates that Native Americans settled along the coastal regions of southern California more than 9,000 years ago. Ocean fishing and nearshore collection of shellfish were important for survival of aboriginal peoples as was hunting and trapping of large and small game. The Chumash were a highly successful and very stable society until colonization of southern California by the Spanish in the late eighteenth century. The introduction of diseases weakened and killed the majority of the population and those who survived blended into the Hispanic community. Today, several thousand Chumash people still live in southern California (Continental Shelf Associates 1995).

#### **4.8.1.3 Historic Resources**

Historic nautical sites (shipwrecks) occur all along the southern California coast including the Santa Barbara Channel and possibly in the vicinity of the project site. This is based upon the number of reported losses off the coastline and the density of coastal traffic dating from the late eighteenth century. Shipping was infrequent during the Spanish colonial period. The first European expedition known to have visited the area was in 1542-1543. Shipping greatly increased during the American period (post 1849) due to the gold rush when California emerged as a world market. Along with the increase in ship traffic came an increase in the number and frequency of reported shipwrecks. Development of fisheries and the discovery of oil also increased ship travel through the area. From 1850-1870 whaling stations were established in the Santa Barbara Channel, but soon oil exploration and production replaced whale oil as a commodity and whaling activities ended by the mid-1880s. Ships remained the primary mechanism for the distribution of goods to and from California until the introduction of major highway and rail systems in the 1930s (Continental Shelf Associates 1995).

Concentrations of shipwreck sites are typically found near harbors and navigationally hazardous areas. Despite the number of potentially significant historic shipwrecks reported, few have been located and identified. The majority of shipwrecks are small craft (less than 10 tons) and are historically insignificant. However, several historic shipwrecks occurred near the Goleta Slough and are the closest known shipwrecks to the project area, these are listed in Table 4.8-1.

Two underwater prehistoric artifacts have been reported offshore of the Goleta Slough mouth approximately 4 miles (6.4 km) east of the project site. These artifacts were found in the seafloor. An anchor found in the slough in 1891 is thought to date from the eighteenth century when the slough was open to the sea and accessible to deepwater ships. In 1981, six cannons

were found near the mouth of the slough. There was speculation that the cannons may have belonged to the Drake expedition of 1579, but it is currently believed that the cannons are from the nineteenth century wreck of the *Dorotea* (Chambers Group 1992).

**Table 4.8-1. Documented Shipwrecks near Project Area**

Name	Date Lost	Location Information
La Joven Angustias	1819	Goleta Slough Mouth
Dorotea	1829	Goleta Slough Mouth
Diana	1838	Goleta Slough Mouth
Fama	1846	Goleta Slough Mouth
Reliance	1878	Goleta Slough Mouth

Source: Chambers Group 1992

A search of the California State Lands Commission shipwreck database was performed for all shipwrecks documented in Santa Barbara County. Results of the database inquiry indicated that there were 69 shipwrecks documented in Santa Barbara County between the years of 1847-1968; however, only one of the five historical shipwrecks listed in the above table appeared in the results of the CSLC database query. None of the documented shipwrecks were located within the project area; however, 20 of the 69 were located east of the project site, within the Santa Barbara Channel. Twelve of the 20 documented shipwrecks in the Santa Barbara Channel occurred near shore around the Santa Barbara Harbor (California State Lands Commission 2000).

The pier remnant structures were built in the 1930s and represent many other pier structures commonly used for oil and gas production in the area. PRC-421 was a part of the Ellwood Field Complex west of Santa Barbara that included many oil piers. Not many structures remain from the Ellwood Field complex; however, these structures have the potential to contain historical value.

The city of Goleta Plan identifies three historical landmarks in Goleta, including the Stow House, the Hope House, and the Sexton House, and three places of historic merit, including Daniel Hill Adobe, Former Site of Southern Pacific Railroad, and Bishop Ranch, but all of these historic locations are onshore from the project area.

#### **4.8.1.4 Ethnographic Resources**

The Chumash people were the indigenous people in the region surrounding the project area. They lived on the coast as well as inland. In coastal villages, people relied on ocean resources for food and survival. They hunted and fished for fish, crustaceans, and mollusks, as well as sea mammals. Plank boats known as tomols were the boats of the Chumash people. The Chumash people relied on tomols for fishing as well as transportation. Tomols were up to 30 feet (9.14 m) long and were light and swift due to their plank construction.

Sinkings of the tomols at sea was probably common, but evidence of these accidents is quite unlikely due to the high-energy offshore environment and the materials from which the tomols were made. Artifacts that are likely to still be in existence would be artifacts lost overboard, such as stone fishnet sinkers. Stone vessels may also have been thrown into the sea for sacrificial purposes (Resource Insights 1999).

#### **4.8.1.5 Regulatory Framework**

Several federal statutes, regulations, and rules govern the protection of cultural resources in the project area. These include the following:

- Antiquities Act of 1906;
- National Historic Preservation Act of 1966;
- Executive Order 11593;
- Archaeological and Historic Preservation Act of 1974;
- American Indian Religious Freedom Act of 1978;
- Shipwreck Preservation Act of 1987;
- Historic Sites Act of 1935.

Pertinent State legislation and local plans that govern the protection of cultural resources in the project area include the following:

- The California Environmental Quality Act (CEQA) and the State CEQA Guidelines (section 15064.5), and California Public Resources Code (sections 21083.2 and 21084.1 );
- California Coastal Commission (CCC) Guidelines for Permitting Archaeological Investigations;
- California State Lands Commission (CSLC) policies and procedures;
- Santa Barbara County Coastal Plan, Archaeological, and Historical Resources Policies;
- Santa Barbara County Comprehensive Plan, Land Use Element; Historical, and Archaeological Site Policies;
- Goleta Community Plan History and Archaeology Policies;
- Native American Heritage Commission Guidelines; and
- The State Historic Preservation Officer (SHPO) has published a number of checklists that may be applicable to evaluate: 1) adequacy of archaeological testing programs; 2) determinations of site significance and uniqueness; and 3) mitigation reports.

## 4.8.2 Impacts and Mitigation Measures

### 4.8.2.1 Methodology

A literature search was conducted to identify documented offshore cultural resources and assess areas of sensitivity within the project site. Information was obtained from several sources including the National Park Service submerged cultural resources unit, California State Lands Commission shipwreck database, National Register of Historic Places, the listing of California Historical Landmarks, and the California Points of Historical Interest.

In addition, a bathymetry study of the project site was conducted in 1999 by Fugro West, Inc. The study found no evidence of shipwrecks within the project site. Eight unidentified sonar targets were charted during the bathymetry survey (Figure 4.1-1, and Appendix F, *Side Scan Sonar Survey*). A follow-up dive survey located these unidentified sonar targets (see Appendix H, *Construction Dive Survey*). Of these targets, five were natural rock outcrops; one was a crab trap, one was a section of sheet pile, and one target was an I-Beam. As such, these targets are not of historical or cultural importance.

The potential impacts of the Proposed Project were assessed through the following process:

1. Defining the agents or causes of impact from the Proposed Project;
2. Outlining the Area of Potential Effect (APE) of the Proposed Project;
3. Identifying the location of any known cultural resources in the Project vicinity;
4. Identifying the sensitivity or likelihood of the occurrence of significant cultural resource within the APE; and
5. Evaluating the significance of those resources and assessing the degree to which the Project would affect their significant aspects.

The APE includes the area within a one-half mile (0.8 km) radius of the PRC-421 remnants offshore of Haskell's beach.

### 4.8.2.2 Significance Criteria

For the purposes of this environmental assessment, an impact would be considered significant if the Project would adversely affect an important or unique archaeological resource as defined in section 15064.5 of the State CEQA Guidelines (California Governor's Office of Planning and Research 2001), section 21083.2 of the California Public Resources Code, and 36 CFR 60.4. Important cultural resources include sites of national, state and local importance that are listed or eligible for listing on the National Register of Historic Places or are designated as National Historical Landmarks, California Historical Landmarks, or local landmarks. State CEQA Guidelines (Appendix G, *Essential Fish Habitat Assessment*) indicate that an impact would be considered significant if the action would:

1. Cause a substantial adverse change in the significance of a historical resource.

2. Cause a substantial adverse change in the significance of an archaeological resource.
3. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.
4. Disturb any human remains, including those interred outside of formal cemeteries.

Section 21083.2 of the California Public Resources Code defines a “unique archaeological resource” as one that:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Section 15064.5 of the State CEQA Guidelines defines an “historically significant” resource as one that meets the criteria for listing on the California Register of Historical Resources including:

1. Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage.
2. Is associated with the lives of persons important in our past.
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
4. Has yielded, or may be likely to yield, information important in prehistory or history.

#### **4.8.2.3 Project Impacts on Cultural Resources**

**CUL-1: Construction of the proposed roosting/nesting platforms would involve minor ocean floor disturbance which could affect unknown paleontological resources.**

##### ***Discussion:***

Potential impacts to paleontological resources involve the possibility that the ocean floor disturbance could crush fossils within the impact area of the pile driving for the roosting/nesting platforms. As indicated above, the Monterey formation has the potential to yield fossils. The Project would only impact bedrock in the area of the four 2-feet (0.61 m) in diameter piles. Because of the limited nature of this impact, the uncertainty of fossils existing within the impact area, and fact that sampling to determine if fossils are present would result in about the same amount of impact as the Project itself. No paleontological resources would be removed from the site.

Additionally, Dr. Larry Agenbroad was consulted with respect to his professional opinion regarding the potential Project impacts to paleontological resources (personal communication, November 2003). He stated that, in his opinion, there would be a very low probability of damage to the vertebrate resources of the Monterey Formation by emplacing four two foot diameter pilings 850 feet (259.08 m) offshore of the Goleta shoreline.

Following the pier removal and pile driving there would not be any activities that would disturb sediments or bedrock below the project site. Therefore, there would be no long-term permanent impacts to paleontological resources.

***Impact/Mitigation:***

Impacts to paleontological resources would not be significant (Class 3); therefore, no mitigation is required.

**CUL-2: Removal of the PRC-421 pier remnants could affect unknown archaeological, historic, and/or ethnographic resources.**

***Discussion:***

There are no known archaeological resources in the project area, although prehistoric remains may occur in the area surrounding the Project. Prehistoric remains may be located on landforms that were previously above water, and are presently submerged and now covered with marine sediments. The other remains may be deposited into the ocean, sitting on the seafloor, or buried in recent sediments. These remains could be prehistoric or historic artifacts.

The only historic shipwrecks known in proximity to the project site are near the Goleta Slough, which is approximately 4 miles (6.4 km) from the pier location. These are all more than 50 years old. However, they are far enough away, located around Coal Oil Point and Goleta Point, that they would not be impacted by the Proposed Project. Thus, the remains of all known wrecks in the area lie outside of the project site.

The likelihood of unrecorded wrecks within the project area is relatively low. The project site is in shallow waters and is not located on an approach to a major harbor or port; therefore, the probability of ship or fishing boat wrecks is low. In addition, extensive dive investigations of the project site and remote bathymetry studies have identified no remains of shipwrecks. With the high-energy wave movement on the southern California coast it is possible that wreck remains could be obscured by sand; however, this is unlikely due to the shallow sand in the project area.

The Proposed Project involves only minor excavation of the seafloor to four feet (1.2 m) below the mudline around each column and the driving of four piles. Therefore, due to the low likelihood of significant artifactual remains, shipwreck remains, or archaeological remains of ethnographic significance within sediments in the project area, and the limited area of proposed sediment excavation and disturbance, potential impacts to such resources are considered less than significant.

The project pier remnant structure was constructed in the 1930s and represents an example of pier structures commonly used in the Ellwood area for oil and gas production. Although the pier remnant structure is over 50 years in age due, to its dilapidated condition and other characteristics, it does not meet the criteria qualifying a resource as a significant historic resource. The Army Corps of Engineers previously evaluated the history of the pier structure and concluded that the structure remnant will not be considered an historic property under Appendix C of 33 CFR 325 (pers. com. from Stephen Dibble, Senior Archaeologist US Army Corps of Engineers [USACOE] to Ms. Tiffany Welch, [USACOE], August 3, 2000).

***Impact/Mitigation:***

Impacts to archaeological, historic, and/or ethnographic resources would not be significant (Class 3). Therefore, no mitigation is required.